

Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A fluorometer for detecting intensity of fluorescence generated from a substance that is excited by light emitted from a light source,

wherein intensities P_1, P_2, \dots, P_n of the fluorescence are detected respectively in n (n is an integer of not less than 2) limited wavelength regions $\lambda_1, \lambda_2, \dots, \lambda_n$ of the fluorescence.

2. (Original) The fluorometer according to claim 1, wherein a relative ratio or a difference between the detected intensities P_1, P_2, \dots, P_n of the fluorescence is determined.

3. (Original) A fluorometer for detecting intensity of fluorescence generated from a substance that is excited by light emitted from a light source, comprising:

n (n is an integer of not less than 2) narrow-band-pass filters for transmitting light in different limited wavelength regions of the fluorescence, and

n light-receiving portions having one-to-one correspondence with the n narrow-band-pass filters,

wherein an intensity P_1 of fluorescence transmitted through a first narrow-band-pass filter is detected by a first light-receiving portion, and

wherein fluorescence reflected from an $(n-1)$ -th narrow-band-pass filter is allowed to enter an n -th narrow-band-pass filter, and an intensity P_n of fluorescence transmitted through the n -th narrow-band-pass filter is detected by an n -th light-receiving portion.

4. (Original) The fluorometer according to claim 3, wherein a relative ratio or a difference between the intensities P_1 , P_2 , ..., P_n of the fluorescence detected respectively by the n light-receiving portions is determined.

5. (Original) A fluorometer for detecting intensity of fluorescence generated from a substance that is excited by light emitted from a light source, comprising:

n (n is an integer of not less than 2) narrow-band reflection-type notch filters for reflecting light in different limited wavelength regions of the fluorescence, and

n light-receiving portions having one-to-one correspondence with the n narrow-band reflection-type notch filters,

wherein an intensity P_1 of fluorescence reflected from a first narrow-band reflection-type notch filter is detected by a first light-receiving portion, and

wherein fluorescence transmitted through an $(n-1)$ -th narrow-band reflection-type notch filter is allowed to enter an n -th narrow-band reflection-type notch filter, and an intensity P_n of fluorescence reflected from the n -th narrow-band reflection-type notch filter is detected by an n -th light-receiving portion.

6. (Original) The fluorometer according to claim 5, wherein the narrow-band reflection-type notch filter comprises a pair of glass substrates and a photopolymer arranged between the pair of glass substrates, and a periodic change in refractive index of the photopolymer occurs in its thickness direction.

7. (Original) The fluorometer according to claim 5, wherein a relative ratio or a difference between the intensities P_1, P_2, \dots, P_n of the fluorescence detected respectively by the n light-receiving portions is determined.

8. (Currently Amended) The fluorometer according to ~~any one of claims 1, 3, and 5~~ claim 1, wherein the light source is a light-emitting diode.

9. (Currently Amended) The fluorometer according to ~~any one of claims 1, 3, and 5~~ claim 1, wherein the light source is a wavelength-variable semiconductor laser.

10. (Currently Amended) The fluorometer according to ~~any one of claims 1, 3, and 5~~ claim 1, wherein a rare-earth element is added to the substance.

11. (Currently Amended) The fluorometer according to ~~any one of claims 1, 3, and 5~~ claim 1, wherein a wavelength width of a spectrum of the fluorescence generated from the substance is detected by comparing the detected intensities P_1, P_2, \dots, P_n of the fluorescence.

12. (New) The fluorometer according to claim 3, wherein the light source is a light-emitting diode.

13. (New) The fluorometer according to claim 3, wherein the light source is a wavelength-variable semiconductor laser.

14. (New) The fluorometer according to claim 3, wherein a rare-earth element is added to the substance.

15. (New) The fluorometer according to claim 3, wherein a wavelength width of a spectrum of the fluorescence generated from the substance is detected by comparing the detected intensities P_1, P_2, \dots, P_n of the fluorescence.

16. (New) The fluorometer according to claim 5, wherein the light source is a light-emitting diode.

17. (New) The fluorometer according to claim 5, wherein the light source is a wavelength-variable semiconductor laser.

18. (New) The fluorometer according to claim 5, wherein a rare-earth element is added to the substance.

19. (New) The fluorometer according to claim 5, wherein a wavelength width of a spectrum of the fluorescence generated from the substance is detected by comparing the detected intensities P_1, P_2, \dots, P_n of the fluorescence.